(a) introducing one or more packaging vectors into a non-primate mammalian cell line, wherein said cell line exhibits substantially no hybridization to a Moloney-MLV retrovirus *gag*, *pol*, and/or *env* probe under stringent washing conditions and is capable of producing human-serum-resistant RVP and wherein said vectors, either singly or collectively, express a cellular targeting protein and retroviral *gag* and *pol* genes in amounts sufficient to package said RVP; and

(b) recovering said packaging cell line.

3. (amended) The method of Claim 1, wherein said cell line expresses galactose α (1,3) galactosyl epitopes and is not treated to reduce such expression.

4. (amended) The method of Claim 1 or 42, wherein said cellular targeting protein is an amphotropic retroviral *env* protein, a xenotropic retroviral *env* protein, a polytropic retroviral *env* protein, a JSRV *env* protein, vesicular stomatitis virus G protein or transferrin.

10. (amended) Producer cells prepared by the ~~method of Claim 6 or 43~~.

14. (amended) The method of Claim 11 or 44, wherein said cellular targeting protein is an amphotropic retroviral *env* protein, a xenotropic retroviral *env* protein, a polytropic retroviral *env* protein, a JSRV *env* protein, vesicular stomatitis virus G protein or transferrin.

20. (amended) Retroviral vector particles produced by the methods of any one of Claims 11, 12, 16 or 45.

Please add the following new claims:

46. (new) A method for preparing a stable, retroviral packaging cell line for generation of human serum-resistant retroviral particles (RVP) which comprises

(a) introducing one or more packaging vectors into a non-primate mammalian cell line, wherein said cell line expresses galactose α (1,3) galactosyl epitopes and is not treated to reduce such expression, and wherein said vectors, either singly or collectively, express a cellular targeting protein and retroviral *gag* and *pol* genes in amounts sufficient to package said RVP; and

(b) recovering said packaging cell line.

47. (new) The method of Claim 46 wherein said cell line is an Mpf cell line.

48. (new) The method of Claim 46, wherein said cell line exhibits substantially no hybridization to a Moloney-MLV retrovirus *gag*, *pol*, or *env* probe under stringent washing conditions.

49. (new) The method of Claim 46 or 47, wherein said cellular targeting protein is an amphotropic retroviral *env* protein, a xenotropic retroviral *env* protein, a polytropic retroviral *env* protein, a JSRV *env* protein, vesicular stomatitis virus G protein or transferrin.

50. (new) A packaging cell line produed by the method of Claim 46 or 47.

51. (new) A method for preparing stable, retroviral producer cells capable of producing human serum-resistant retroviral vector particles (RVP) which comprises

(a) introducing a retrovirus vector into the packaging cell line of Claim 46, wherein said retrovirus vector is capable or being packaged into an RVP and comprises a heterologous gene capable or expression in a human; and

(b) recovering said producer cells.

52. (new) The method of Claim 51 wherein said cells are Mpf cells.

53. (new) The method of Claim 51, wherein said cells exhibit substantially no hybridization to a Moloney-MLV retrovirus *gag*, *pol*, or *env* probe under stringent washing conditions.

54. (new) The method of Claim 51, wherein said cellular targeting protein is an amphotropic retroviral *env* protein, a xenotropic retroviral *env* protein, a polytropic retroviral *env* protein, a JSRV *env* protein, vesicular stomatitis virus G protein or transferrin.

55. (new) Producer cells prepared by the method of Claim 51 or 52.

56. (new) A method for preparing human serum-resistant retroviral vector particles (RVP) which comprises:

(a) introducing a retrovirus vector into the packaging cell line of Claim 1, wherein said retrovirus vector is capable of being packaged into an RVP and comprises a heterologous gene capable of expression in a human;

(b) culturing said cell line for a time and under conditions sufficient to produce said RVP; and

(c) recovering said RVP.

57. (new) The method of Claim 56, wherein said cell line is an Mpf cell line.

58. (new) The method of Claim 56 wherein said cell line exhibits substantially no hybridization to a Moloney-MLV retrovirus *gag*, *pol*, or *env* probe under stringent washing conditions.

59. (new) The method of Claim 56 or 57, wherein said cellular targeting protein is an amphotropic retroviral *env* protein, a xenotropic retroviral *env* protein, a polytropic retroviral *env* protein, a JSRV *env* protein, vesicular stomatitis virus G protein or transferrin.

60. (new) The method of Claim 56, wherein said cell line produces RVP having a supernatant titer on mink cell line Mv-1-Lu of at least about 10^4 to about 10^8 colony forming units per millimeter.

61. (new) A method for preparing human serum-resistant retroviral vector particles (RVP) which comprises:

(a) culturing the producer cells of Claim 51 for a time and under conditions sufficient to produce said RVP; and

(b) recovering said RVP.

62. (new) The method of Claim 61, wherein said cells are Mpf cells.

63. (new) The method of Claim 61, wherein said cells exhibit substantially no hybridization to a Moloney-MLV retrovirus *gag*, *pol*, or *env* probe under stringent washing conditions.

64. (new) The method of Claim 61, wherein said cellular targeting protein is an amphotropic retroviral *env* protein, a xenotropic retroviral *env* protein, a polytropic retroviral *env* protein, a JSRV *env* protein, vesicular stomatitis virus G protein or transferrin.

65. (new) The method of Claim 61, wherein said cell line produces RVP having a supernatant titer on mink cell line Mv-1-Lu of at least about 10^4 to about 10^8 colony forming units per millimeter.

66. (new) Retroviral vector particles produced by the methods of any one of Claims 56, 57, 61 or 62.

67. (new) Retroviral particles prepared from the producer cells of Claim 55.

68. (new) A method for transferring a heterologous gene into a human cell which comprises contacting said human cell with the producer cells of Claim 55 under conditions such that said producer cells release RVP containing a retrovirus vector encoding said heterologous gene and thereby introducing said gene into said human cell.

69. (new) The method of Claim 68, wherein said producer cells are implanted in a human.

70. (new) The method of Claim 69, wherein said producer cells are implanted in a human brain.